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3-24-03

Date March 14, 2003 Label No. EV122923490US

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Ashley Smith  
Name (Print)

*Ashley Smith*  
Signature

**Expedited Procedure Requested  
Under 37 C.F.R. §1.116**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: COVARRUBIAS )

Application No.: 09/803,225 )

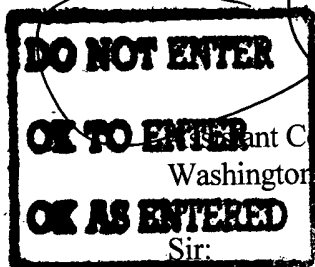
Group Art Unit: 1731

Filed: March 9, 2001 )

Examiner: Chin, Peter

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GROUP 1700

For: PAPERMAKING PULP INCLUDING RETENTION SYSTEM



**AMENDMENT AFTER FINAL**

Assistant Commissioner for Patents  
Washington, D.C. 20231

March 14, 2003

This Amendment is in response to the Final Office Action dated November 21, 2002, for which the Examiner has set a three-month period for response. A petition for a One-Month Extension of Time and the requisite fee are submitted herewith, thus making the response due on or before March 21, 2003.

Please amend the above-identified application as follows:

**IN THE CLAIMS**

Please cancel claim 9 without disclaimer or prejudice of the subject matter set forth therein.

Please substitute the following amended claims for the pending claims with the same numbers in the above-identified application. (A version of the amended claims with markings to show the changes made is also attached.)

1. A method of making paper or paperboard comprising:

introducing fibrous cationic colloidal alumina microparticles to a papermaking pulp and introducing at least one polymer to said papermaking pulp, to form a treated pulp, said

polymer comprising a cationic polymer, a nonionic polymer, or an amphoteric polymer under cationic conditions or combinations thereof; and

forming the treated pulp into paper or paperboard, wherein said fibrous cationic colloidal alumina microparticles are added to said papermaking pulp prior to introducing said polymer to said pulp.

13. (Amended) The method of claim 1, wherein said polymer is a synthetic, water-soluble cationic polymer containing acrylamide units and cationic monomeric units.

17. (Amended) A papermaking apparatus comprising a supply of fibrous cationic colloidal alumina microparticles, a supply of a papermaking pulp, a device for feeding fibrous cationic colloidal alumina microparticles from the supply of fibrous cationic colloidal alumina microparticles to the supply of papermaking pulp, a supply of a retention system polymer, a device for feeding retention system polymer from the supply of retention system polymer to the pulp or treated pulp, wherein the supply of fibrous cationic colloidal alumina microparticles is located upstream from the supply of the retention system polymers, and a device for forming the pulp into a paper or paperboard after treatment with said fibrous cationic colloidal alumina microparticles and said retention system polymer, wherein said retention system polymer is a cationic polymer, a nonionic polymer, or an amphoteric polymer under cationic conditions, or combinations thereof.

22. (Amended) A paper or paperboard made from a drained paperweb, said paperweb comprising a treated pulp, said treated pulp comprising cellulosic fibers, fibrous cationic colloidal alumina microparticles, and at least one retention system polymer, said retention system polymer comprising a cationic polymer, a nonionic polymer, or an amphoteric polymer under